

AMENDMENT(S) TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in this application:

Listing of Claims:

Claims 1-12, (Cancelled).

13. (Previously presented) A method for making a catalytic material which comprises the steps of:

- a) pretreating a zeolite;
- b) combining the pretreated zeolite with water, an inorganic oxide or a precursor of an inorganic oxide, and at least one mesopore-forming organic compound to form a mixture;
- c) drying the mixture;
- d) heating the dried mixture to a temperature and for a period of time sufficient to form a mesoporous inorganic oxide structure,

wherein the zeolite is a lamellar zeolite and the pretreatment includes delamination or intercalation of the lamellar zeolite.

14. (Original) The method of claim 13 wherein said delamination is accomplished by contacting the lamellar zeolite with an alkali solution of cationic surfactant under conditions allowing the lamellar zeolite to swell and delaminate.

15. (Original) The method of claim 13 wherein the delamination of the zeolite comprises subjecting the zeolite to ultrasonic treatment.

Claims 16-25, (Cancelled)

26. (Original) A method for making a catalytic material which comprises the steps of:

- a) contacting a lamellar structured zeolite with an alkaline solution of cationic surfactant under conditions allowing the lamellar zeolite to swell;
- b) combining the swollen zeolite with water, an inorganic oxide or a precursor of an inorganic oxide, and at least one mesopore-forming organic compound to form a mixture;
- c) delaminating the lamellar zeolite;
- d) drying the mixture;
- e) heating the dried mixture to a temperature and for a period of time sufficient to form a mesoporous oxide structure.

27. (Original) The method of claim 26 wherein said mesopore-forming organic compound is selected from the group consisting of glycerol, diethylene glycol, triethylene glycol, tetraethylene glycol, propylene glycol, triethanolamine, triisopropanolamine, sulfolane, tetraethylene pentamine and diethylene glycol dibenzoate.

28. (Original) The method of claim 26 wherein said mesopore-forming organic compound has a boiling point of at least 150°C.

29. (Original) The method of claim 26 wherein the inorganic oxide is formed by reacting an inorganic oxide precursor with the water.

30. (Original) The method of claim 29 wherein the inorganic oxide precursor is selected from the group consisting of silica sources and alumina sources.

31. (Original) The method of claim 26 wherein the mixture is maintained at a pH above about 7.0.

32. (Original) The method of claim 26 wherein the mixture is dried by heating in air at a temperature and for a period of time sufficient to drive off water and volatile organic compounds.

33. (Original) The method of claim 26 wherein the heating step (e) comprises heating the dried mixture to a temperature of from about 100°C to about 250°C.

34. (Original) The method of claim 26 wherein the heating step (e) comprises heating the dried material to a temperature of from about 150°C to about 200°C.

35. (Original) The method of claim 26 further comprising the step of calcining the heated dried mixture at a temperature of from about 300°C to about 1000°C.

36. (Original) The method of claim 26 further including the step of calcining the heated dried mixture at a temperature of from about 400°C to about 700°C for about 2 hours to about 40 hours.

37. (Original) The method of claim 26 further comprising combining metal ions with the mixture, the metal being selected from the group consisting of aluminum, titanium, vanadium, zirconium, gallium, boron, manganese, zinc, copper, gold, lanthanum, chromium, molybdenum, nickel, cobalt, iron, tungsten, palladium and platinum.

38. (Original) The method of claim 26 further comprising the steps of admixing a binder with the catalytic material and forming the catalytic material into a predetermined shape.

Claims 39 to 55, (Cancelled)